

## WHAT IS CLAIMED IS:

1. A peer-to-peer communication apparatus for performing one-to-one communication with another communication apparatus via an IP network,  
5 comprising:

first means for performing an encryption process and/or an authentication process with respect to a packet;

10 second means for acquiring, from a peer's communication apparatus specified by a user of the communication apparatus, presence information including information for judging a communication security environment of said peer's communication apparatus and security policy information including  
15 an encryption rule and an authentication rule each to be applied to packets by said peer's communication apparatus; and

20 third means for displaying said presence information and said security policy information such that said user judges propriety of the security policy information based on the presence information and allowing the user to partly change the security policy information,

25 said first means processing a packet to be transmitted to said peer's communication apparatus

in accordance with a security policy approved by the user.

2. A peer-to-peer communication apparatus according to claim 1, further comprising:

5 a memory for storing the security policy information acquired from said peer's communication apparatus or the security policy information partly changed by the user via said third means, wherein  
said first means processes the packet to be  
10 transmitted to the peer's communication apparatus in accordance with a security policy stored in the memory.

3. A peer-to-peer communication apparatus according to claim 1, further comprising:

a first memory for storing default security  
15 policy information to be applied by the communication apparatus to peer-to-peer communication with the other communication apparatus;

a second memory for storing the presence information including the information for judging the  
20 communication security environment of the communication apparatus; and

fourth means for returning in response to a request for the presence information and the security policy information from the other communication  
25 apparatus, a response message including the default

security policy information read out from said first memory and the presence information read out from said second memory.

4. A peer-to-peer communication apparatus  
5 according to claim 3, further comprising:

a presence information processing unit for partly changing, upon occurrence of a change in the communication environment resulting from movement of the communication apparatus, said presence 10 information stored in said second memory.

5. A peer-to-peer communication apparatus according to claim 1, wherein said first means processes a data packet to be transmitted and a packet received from the IP network in accordance with a 15 security policy of IP security protocols defined by the IETF.

6. A method for peer-to-peer communication between a first communication apparatus and a second communication apparatus each connected to an IP 20 network, the method comprising the steps of:

requesting, from the first communication apparatus to the second communication apparatus, presence information for judging a communication security environment of said second communication 25 apparatus and security policy information including

an encryption rule and an authentication rule to be applied to a packet by said second communication apparatus;

transmitting, from the second communication apparatus to the first communication apparatus, the presence information and security policy information of the second communication apparatus;

outputting to a display screen by the first communication apparatus, the presence information and security policy information received from said second communication apparatus such that a user can judge propriety of the security policy information based on the presence information; and

performing packet communication with the second communication apparatus by the first communication apparatus in accordance with the security policy approved by the user on said display screen.

7. A method for peer-to-peer communication according to claim 6, further comprising the step of:

allowing the user to partly correct the security policy information outputted to said display screen by the first communication apparatus, wherein

the first communication apparatus performs the packet communication with the second communication apparatus in accordance with said corrected security

policy.